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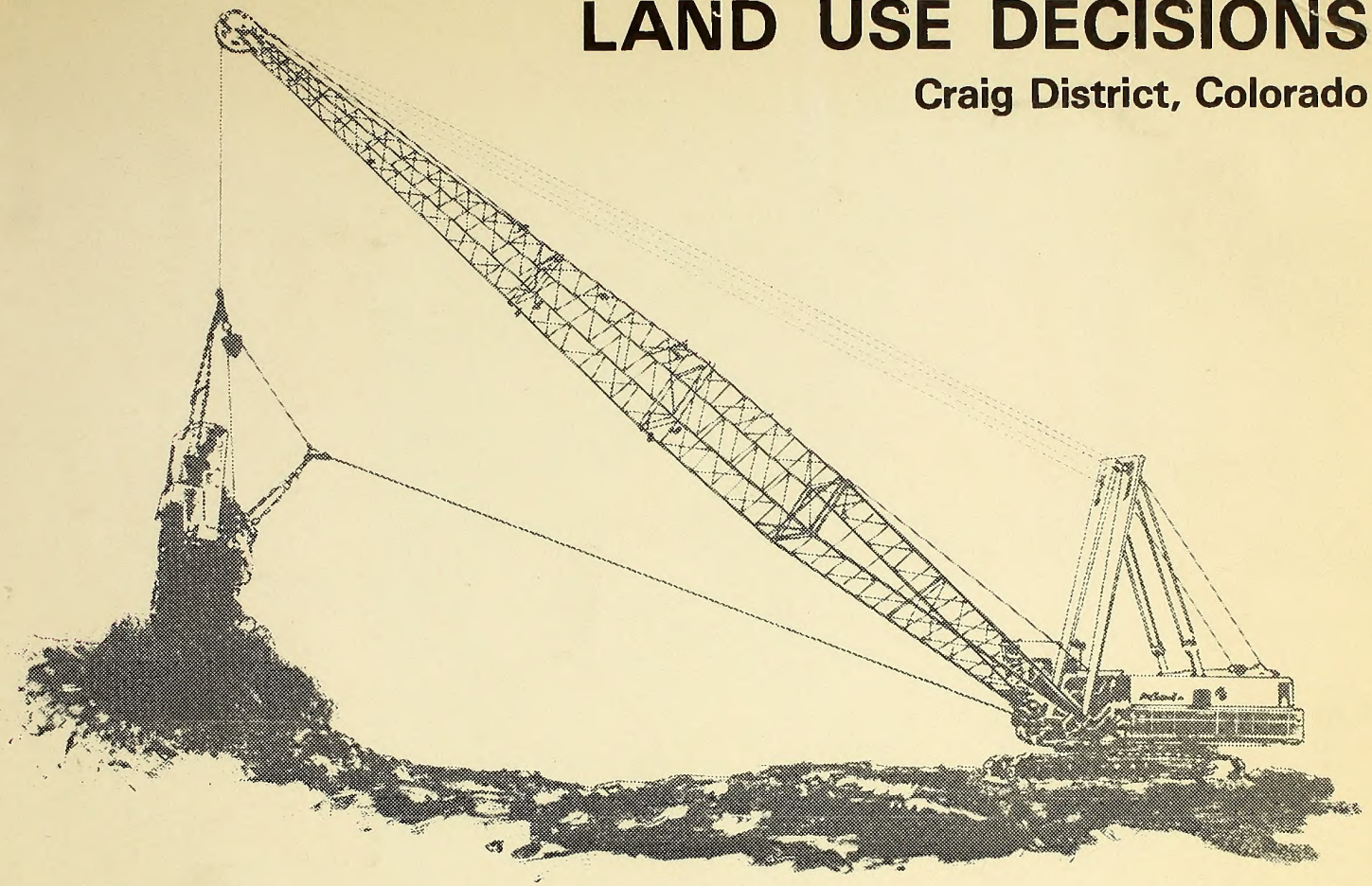
Supplement to

Williams Fork Management Framework Plan

LAND USE DECISIONS

Craig District, Colorado



Determination of Unsuitability for Coal Development

1603

Supplement to Williams Fork
Management Framework Plan
Land Use Decisions Craig
District, Colorado
Determination of Unsuitability

#7623621

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1603 HD 243 .C6 W5665 1979

SUPPLEMENT TO THE WILLIAMS FORK MANAGEMENT FRAMEWORK PLAN

DETERMINATIONS OF UNSUITABILITY FOR COAL DEVELOPMENT

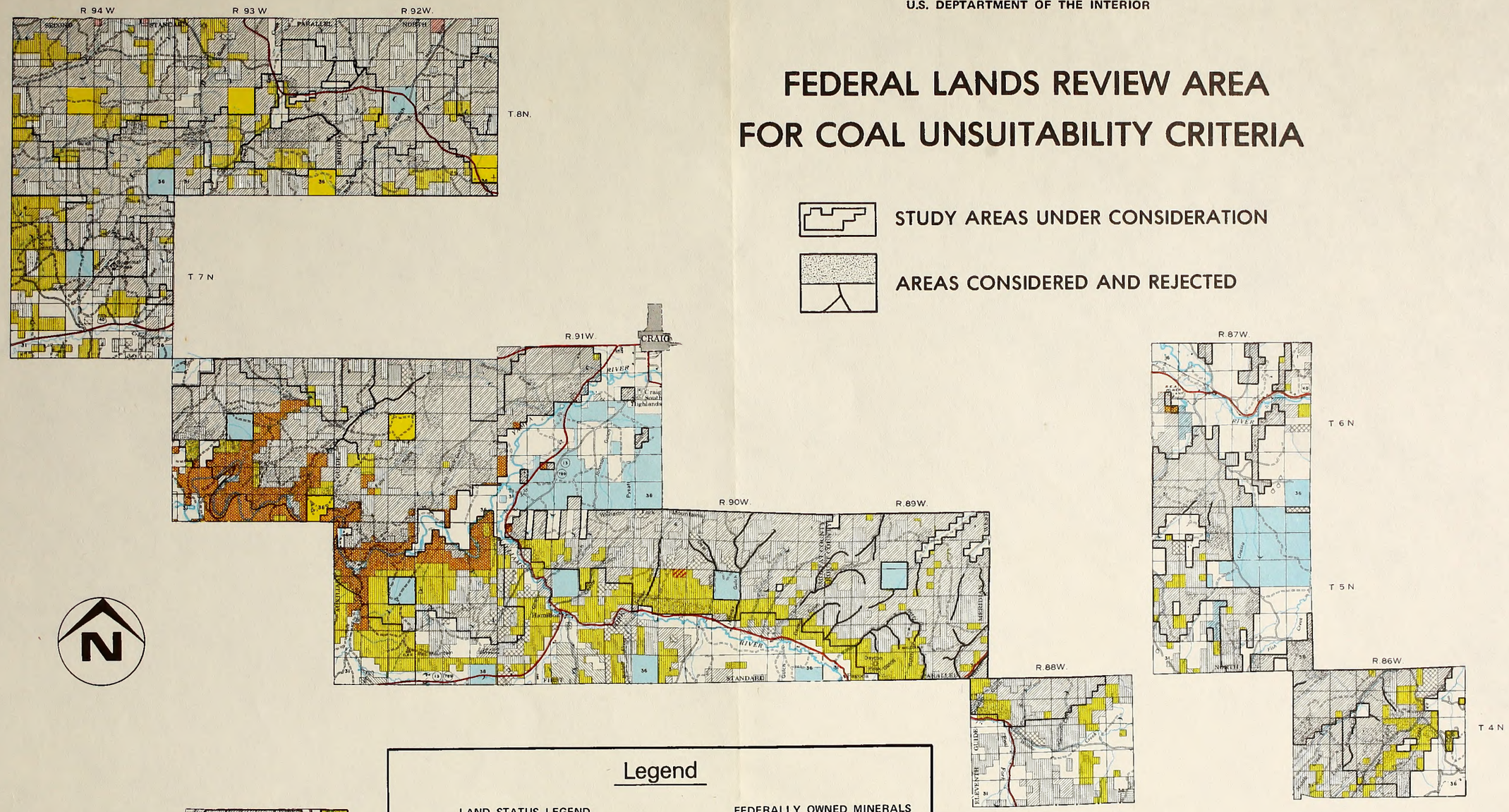
BUREAU OF LAND MANAGEMENT

U.S. DEPTARTMENT OF THE INTERIOR

FEDERAL LANDS REVIEW AREA FOR COAL UNSUITABILITY CRITERIA

STUDY AREAS UNDER CONSIDERATION

AREAS CONSIDERED AND REJECTED



Legend

LAND STATUS LEGEND

- PUBLIC OOMAIN (Including National Resource Lands)
- STATE LANDS (Wildlife, Parks & Outdoor Recreation Areas)
- RECLAMATION & WATER POWER PROJECTS WITHORAWAL
- PATENTEO LANOS
- PUBLIC WATER RESERVE
- BANKHEAO - JONES L.U. LANOS

FEDERALLY OWNED MINERALS

- ALL MINERALS
- COAL ONLY
- OIL & GAS ONLY
- OIL, GAS & COAL ONLY
- OTHER
- NO FEOERAL OWNERSHIP

I. INTRODUCTION AND PURPOSE

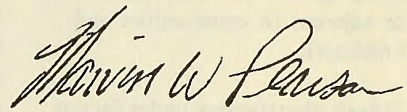
This document is a summary of the supplement to the Williams Fork Management Framework Plan (MFP). The supplement itself specifically addresses land use plans for a small portion (16 townships) of the Williams Fork Planning Unit identified by BLM as having valuable coal resources.

Under the Secretary of Interior's new policy, leasing would be considered for Federal lands which have not been found unsuitable for coal mining through the application of specific "unsuitability" criteria. The purpose of unsuitability criteria is to point out areas with key features and environmental sensitivities that make them unsuitable for certain types of coal mining and therefore not suitable for coal leasing.

This process has resulted from recent action by the President and Congress. On May 24, 1977, the President instructed the Secretary of Interior to lease "only those areas where mining is environmentally acceptable and compatible with other land uses." The President further directed that the Department "scrutinize existing Federal coal leases (and preference right coal lease applications) to determine whether they show prospects for timely development in an environmentally acceptable manner, taking steps as necessary to deal with non-producing and environmentally unsatisfactory leases and applications." (See Abstract of the Final Environmental Statement, Federal Coal Management Program.)

On August 3, 1977, the President signed into law the Surface Mining Control and Reclamation Act. Section 522 of the Act requires the Secretary of the Interior to conduct a Federal lands review in order to determine those lands unsuitable for surface coal mining. Federal lands also include private surface underlain by Federal coal.

The intent of this brochure is to summarize the results and more clearly define the Federal Lands Review process as applied to portions of the Williams Fork Planning Unit. The Williams Fork MFP Supplement, available in the Craig District Office, has been prepared by an interdisciplinary team of BLM resource specialists with input from the public as well as other Federal and State agencies. The decisions presented in this document directly affect your pubic lands and resources. I hope that you will take the time to read it.



Marvin Pearson
District Manager
Craig District
July, 1979

II. DESCRIPTION OF THE UNSUITABILITY PROCESS

The Federal Land Review and Management Framework Plan Supplement for the Williams Fork Planning Unit involves the application of 20 unsuitability criteria adopted by the Secretary of the Interior under the Preferred Alternative Federal Coal Management Program.[1] These 20 criteria can be divided into four categories:

1. Those required under Section 522 of the Surface Mining Control and Reclamation Act (SMCRA)(e.g., Federal land systems, buffer zones along rights-of-way and easements or adjacent to communities and buildings);

2. Criteria discretionary under Section 522 of SMCRA (e.g., lands used for scientific studies, municipal watersheds, and floodplains);

3. Other requirements under statute which the Department chooses to enforce through application of specific criteria (e.g., Federally listed endangered species, and bald and golden eagle protection); and

4. Those resources which are not addressed specifically by statute, but which are of high public interest (e.g., scenic areas, state fish and wildlife and state lands criteria).

The 20 criteria were applied within limits imposed by a predetermined schedule and by the availability of data. If it were decided that sufficient data were not available to apply the criteria, areas were considered suitable subject to additional information that may come forth during activity planning, lease sale, or post lease sale activities.

The actual application of the unsuitability criteria was accomplished in four steps. First, the criteria were applied without any exceptions.

Second, exceptions to the criteria were applied. Exceptions would allow coal mining to proceed subject to certain stipulations which would be expressed in the lease or mining permit.

Third, areas which were suitable after application of the criteria but where there were conflicts with existing multiple use resource management decisions were determined to be unsuitable.

Fourth, surface owners were consulted, as required by Section 714(d) of SMCRA. Owners were asked to state their preference for or against the leasing of Federal coal under their land. If owners opposed leasing of the coal under their land, coal development there was dropped from further consideration.

The unsuitability criteria were applied to existing Federal coal leases that do not have an approved mine plan and are not currently under production. The results were noted. The criteria will be formally applied when the mining plans are submitted for approval.

Since this brochure is a summary, some of the detailed supportive data including legal land descriptions have not been included. The illustrations included are reproductions and should not be used for detailed site specific analyses or interpretations. Detailed information is available in the MFP supplement itself, available for public review at the Craig District Office of the Bureau of Land Management, 455 Emerson Street, Craig, Colorado, 81625.

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[1] Refer to Final Environmental Statement Federal Coal Management Program for a detailed description of the Preferred Alternative.

III. LOCATION AND OVERVIEW OF AREA

The Williams Fork Planning Unit is located along the western front of the Continental Divide in northwest Colorado. It includes part of Moffat, Routt, Rio Blanco and Garfield Counties. The major cities within the unit are Craig, Hayden, Steamboat Springs, and Oak Creek (Illustration Number 1).

Economic growth in the area has been and continues to be largely attributable to mining. Currently there are nine companies strip mining and two companies mining underground with an annual production of nearly 14 million tons of coal. Within the Williams Fork Planning Unit are 16 townships that were chosen for the application of the unsuitability criteria. The townships were picked on the basis of existing coal resource data and apparent competitive interest from industry. This interest was inferred from the following information:

1. The Williams Fork MFP Coal Update, August 1976;

2. Letters of intent and information compiled in the Northwest Coal Supplemental Report, 1978;

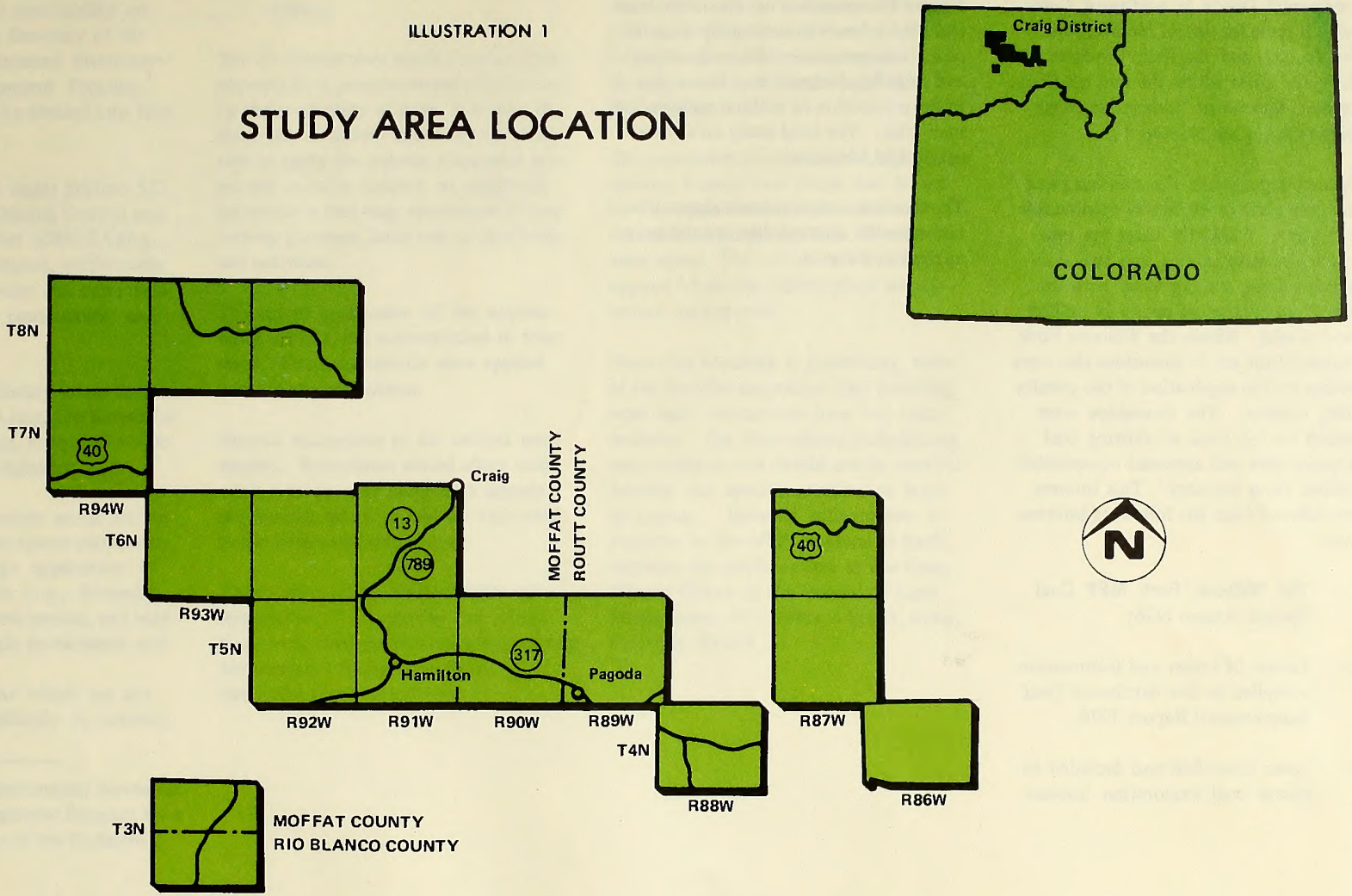
3. Areas identified and included in recent coal exploration licenses.

Application of the criteria within those 16 townships was limited to designated Known Recoverable Coal Resource Areas (KRCRA); lands underlain by Federal coal (both private and Federal surface); and existing Federal coal leases not under production or without an approved mine plan. The total study area covers nearly 166,464 acres.

The discussion that follows shows how and why the unsuitability criteria were applied to this area.

ILLUSTRATION 1

STUDY AREA LOCATION



IV. SUMMARY OF THE UNSUITABILITY APPLICATION AND POSSIBLE IMPACTS

After the four steps of the MFP Supplement were completed, about 40,244 acres or 24% of the study area were considered unsuitable for surface coal mining. The remaining 126,220 acres were considered suitable for further consideration of coal leasing. The map foldout included in this brochure shows both the unsuitable and suitable areas within the study area.

Following is a summary of the results in each step of the application of unsuitability criteria to the area.

In the first step, applying the unsuitability criteria without exceptions, 11 of the 20 criteria were found not to apply to the study area. The remaining 9 criteria did apply and were used to delineate areas unsuitable for surface coal mining. Table 1 lists the criteria and their applicability.

After applying the criteria without exceptions, a total of 24,603 acres or 14.98% of the total 166,464 acres in the study area was considered unsuitable. Illustration Number 2 shows the areas considered unsuitable after application of the criteria.

In the second step, exceptions to criteria were considered and were found to apply to 5 of the 9 criteria from step 1. Table 2 lists the criteria for which exceptions were applied. After application of the exceptions, 23,484 acres or 14.1% of the study area remained unsuitable. Illustration Number 3 shows the unsuitable areas remaining after applying exceptions.

In the third step, unsuitability was considered from a multiple-use trade-off point of view. Some lands that were not eliminated from leasing on the basis of the nine criteria identified in step 1 were found unsuitable on the basis of a previous MFP decision.

In this step, the Little Yampa Canyon was recommended to be designated as a natural area based on its outstanding scenic and recreational potential. This would restrict use of an additional 700 acres of land. About 5,800 acres of that prospective natural area were found unsuitable through application of the criteria.

In the final step, surface owners of land considered suitable up to this point were contacted to determine their preference for or against leasing. Of the 187 landowners consulted, 79, or 36%, responded. On the basis of those who opposed leasing, an additional 16,060 acres, or 10% of the study area, were unsuitable.

The following table (Table 3) lists the acreage and percentage of the study area considered unsuitable after each step of the process.

TABLE 1

CRITERIA APPLICABLE TO STUDY AREA

Criterion Number	Criterion Title	Applicable to Study Area
1	Federal Land Systems	No
2	Rights-of-Way and Easements	Yes
3	Buffer Zones Along Rights-of-Way	Yes
4	Wilderness Study Areas	No
5	Scenic Areas	No
6	Lands Used for Scientific Studies	No
7	Historic Lands and Sites	Yes
8	Natural Areas	No
9	Federally Listed Endangered Species	Yes
10	State Listed Endangered Species	Yes
11	Bald and Golden Eagle Nests	Yes
12	Bald and Golden Eagle Roost and Concentration Areas	Yes
13	Falcon Cliff Nesting Sites	No
14	Migratory Birds	No
15	State Resident Fish and Wildlife	Yes
16	Floodplains	Yes
17	Municipal Watersheds	No
18	National Resource Waters	No
19	Alluvial Valley Floors	No
20	State Proposed Criteria	No[1]

[1] Criterion 20 depends on input from the State of Colorado. To date no input has been received.

TABLE 2

APPLICATION OF EXCEPTIONS TO CRITERIA

Criterion Number	Criterion Title	Exceptions Applicable
2	Rights-of-Way and Easements	Yes
3	Buffer Zones Along Rights-of-Way	Yes
7	Historic Lands and Sites	No
9	Federally Listed Endangered Species	No
10	State Listed Endangered Species	No
11	Bald and Golden Eagle Nests	No
12	Bald and Golden Eagle Roost and Concentration Areas	No
15	State Resident Fish and Wildlife	No
16	Floodplains	No

TABLE 3

LAND UNSUITABLE AFTER EACH STEP OF THE PROCESS

	Acres	%
Area Unsuitable (Without Exceptions)[1]	24,603	15
Area Unsuitable (With Exceptions)[1]	23,484	14
Area Unsuitable (Multiple Use Trade-Off)[2]	700	.4
Area Unsuitable (Surface Owner Consultation)	16,060	10
Total Area Unsuitable	40,244	24

[1]Areas unsuitable as a result of applications of 24 unsuitability criteria.
[2]Excludes area overlapping with other criteria.

Approximately 40,244 acres of land in the 16 townships in the unit were considered unsuitable for coal leasing. Lands considered unsuitable are those which clearly should not be mined because of resource conflicts and environmental sensitivities which cannot be mitigated or which would require stipulations in the lease or mining permit so restrictive that mining would be uneconomic.

All the lands included in this MFP Supplement are within the Yampa and Danforth Hills Known Recoverable Coal Resource Areas and are classified as being valuable for coal development by the U. S. Geological Survey.

Of these lands, 40,244 acres, or 24% were eliminated from further consideration for surface coal mining.

The impact of unsuitability designation on coal resources development is difficult to quantify on the basis of present data. Much of the area appears to have potential for both surface and underground coal mining as indicated on the USGS Coal Development Potential Maps. There is further indication of abundant coal resources. Some surface mines are operating in areas previously or presently mined underground. In addition, many underground mines are being planned in areas where there are active surface mines.

The demand for coal from the Williams Fork Planning Unit has been indicated in environmental statements and other studies. The Northwest Colorado Coal Environmental Statement prepared in 1976 projected the total coal produced from the region in 1980 to be 8.2 million tons per year. Based on current production figures and full scale operation projections, production could exceed 14 million tons of contractually obligated coal by 1980. This is 63% more than the 1976 estimate. In addition, there has been considerable coal exploration in the area by industry.

The increasing demand for western coal is attributable to the sharp rise in the price of oil and and natural gas and the ready availability of coal in the vicinitv of electrical utility power plants.[2] Many of the new western power plants are burning coal instead of oil or natural gas. The coal is coming from western mines.

In the Williams Fork Planning Unit, Hayden Station has a capacity of 450 megawatts and units 1 and 2 of the Craig Station, which are nearing completion, have a combined capacity of 760 megawatts. Both feed into a regional power network. Colorado-Ute Electric Association, operator of the 2 plants, has plans for a third generation unit for the

[2]Final Environmental Statement, Federal Coal Management Program.

ILLUSTRATION 2

UNSUITABILITY PRIOR TO EXCEPTIONS

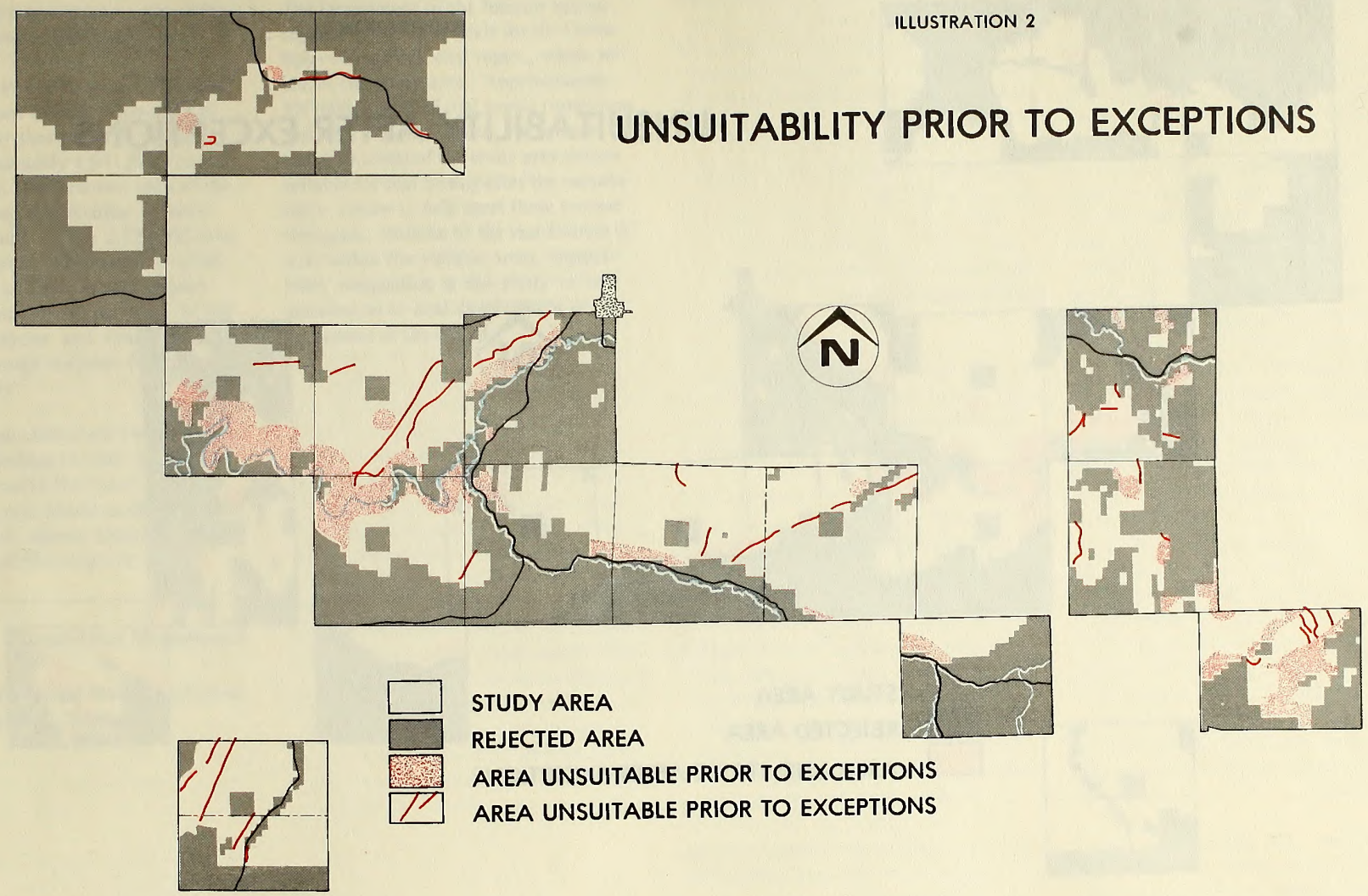
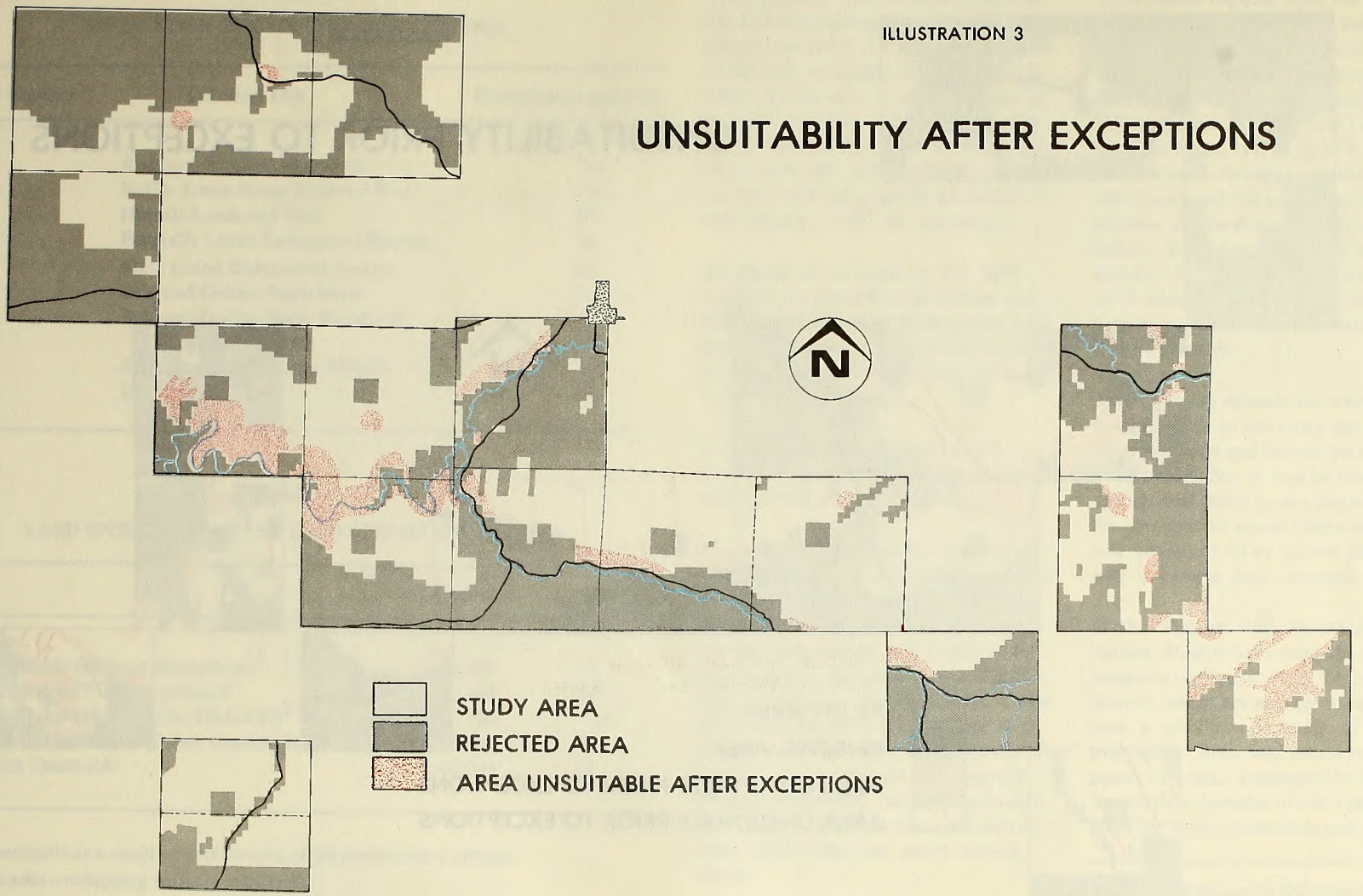


ILLUSTRATION 3

UNSUITABILITY AFTER EXCEPTIONS



Craig Station that will have a generating capacity of about 380 megawatts.

The Hayden Power Plant, in 1977, used 1,291,000 tons of coal. Operating at peak capacity year-round, it would require approximately 1,971,000 tons of coal per year. The first two units of the Craig Station, if operating at peak capacity, would require 3,329,000 tons of coal per year. Peak capacity of all three units at Craig would require 4,993,500 tons of coal per year. At full capacity, Hayden and Craig plants combined would consume 6.96 million tons annually.[3]

Some western plants now burning oil or gas are converting to coal. More may convert to coal in the future.[4] Coal to fuel these power plants could come from western coal regions including the Williams Fork Planning Unit.

The Department of the Interior has set regional production goals for the Green River-Hams Fork coal region, which includes the study area. Approximately 531 million tons of coal would come from this coal region. About 76 percent (126,220 acres) of the study area remain suitable for coal leasing after the unsuitability review to help meet these production goals. Because of the vast amount of coal within the suitable areas, unsuitability designation is not likely to be detrimental to coal development or the economies of the region.

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[3]Northwest Colorado Coal Supplemental Report

[4]Final Environmental Statement Federal Coal Management Program

V. RESULTS OF INDIVIDUAL CRITERION AND EXCEPTION APPLICATION

CRITERION 1: FEDERAL LAND SYSTEMS

All Federal lands included in the following land systems or categories shall be considered unsuitable for coal mining:

> National Park System, National Wildlife Refuge System, National System of Trails, National Wilderness Preservation System, National Wild and Scenic Rivers System, National Recreation Areas, and other federally purchased recreation lands, Custer National Forest, and Federal lands in incorporated cities, towns, and villages.

All Federal lands which are recommended for inclusion in such systems or categories by the Administration in legislative proposals submitted to the Congress or which are required by statute to be studied for inclusion in such systems or categories shall be considered unsuitable. A lease may, however, be issued for underground coal mining within the Custer National Forest, with the consent of the Department of Agriculture. In applying this criterion, the authorized officer shall consult with the appropriate managing agencies of these land systems or categories.

Exemptions: The application of this criterion to lands within the listed land systems and categories is subject to valid existing rights.

Results: The areas under study do not contain lands that are included in, or being recommended for, inclusion (by the Administration in legislative proposals to Congress) in the indicated land systems or categories.

None of the areas under review are considered unsuitable.

CRITERION 2: RIGHTS-OF-WAY AND EASEMENTS

Federal lands that are within rights-of-way or easements or within surface leases for residential, commercial, industrial or other public purposes shall be considered unsuitable.

Exceptions: A lease may be issued, and mining operations approved, in such areas if the surface management agency determines that:

i all or certain types of coal development (e.g., underground mining) will not interfere with the purpose of the right-of-way or easement; or

ii the right-of-way or easement was granted for mining purposes; or

iii the right-of-way or easement was issued for a purpose for which it is not being used; or

iv the parties involved in the right-of-way or easement agree to leasing; or

v it is impractical to exclude such areas due to the location of coal and method of mining and such areas or uses can be protected through appropriate stipulations.

Exemptions: This criterion does not apply to lands on which mining would result in substantial loss or reduction of long-range productivity of food or fiber products, and it does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: Section 522(e) of PL-95-87 addresses valid existing rights in describing areas as not suitable for surface coal mining. Existing rights-of-way and easements across Federal lands are considered valid existing rights, and are considered unsuitable under the criteria only. When the exceptions are applied, these lands will be considered suitable, provided the parties involved in the right-of-way or easement agree to leasing (exception iv) or to having the right-of-way moved.

In the event that this agreement is not obtained, the right-of-way or easement could be adequately protected by stipulations.

Stipulations:

1. In the event that it is impractical to relocate a right-of-way or easement, mining will not be permitted within the right-of-way or within a designated buffer zone along the right-of-way.

2. Relocation of the right-of-way will be required through consultation between the right-of-way holder and the lessee. All costs involved in the relocation will be borne by the lessee.

CRITERION 3: BUFFER ZONES ALONG RIGHTS-OF-WAY AND ADJACENT TO COMMUNITIES AND BUILDINGS

Federal lands affected by Section 522(e), (4), and (5) of the Surface Mining Control and Reclamation Act of 1977 shall be considered unsuitable. This includes lands within 100 feet of the outside line of the right-of-way of a public highway or within 100 feet of a cemetery, or within 300 feet of an occupied public building, school, church, community or institutional building or public park or within 300 feet of an occupied dwelling.

Exceptions: A lease may be issued and mining operations approved for lands:

i where mine access roads or haulage roads join the right-of-way of the public road;

ii. for which the Office of Surface Mining Reclamation and Enforcement has issued a permit to have public roads relocated; or

iii. for which owners of occupied buildings have given written permission to mine within 300 feet of their buildings.

Exemption: The application of this criterion is subject to valid existing rights.

Results: Public Law 95-87, 91 Stat. 509, Section 522(e)(4 & 5) states: After enactment of this Act and subject to valid existing rights no surface coal mining operations...shall be permitted... (4) within one hundred feet of the outside right-of-way line of any public road... (5) within three hundred feet from any occupied dwelling...nor within three hundred feet of any public building, school, church, community, or institutional building, public park or within one hundred feet of a cemetery.

The described rights-of-way could be relocated by permit issued by the Office of Surface Mining Reclamation and Enforcement if a conflict with mining occurs. Stipulations protecting such rights-of-way could be incorporated into a lease if relocation is impractical. Such stipulations could prohibit mining within a preestablished buffer zone.

All dwellings indicated are on privately owned surface. The owners of these dwellings could give permission to have the buildings moved or permit mining near them. This permission could be implied from the results of the surface owner consultation. By applying exceptions, no area was determined to be unsuitable.

Stipulations:

1. If it is impractical to relocate the right-of-way of a public highway, mining will be prohibited within that right-of-way and within a 100-foot buffer zone from the outside line of the right-of-way.

2. The lessee will consult with all owners of occupied dwellings and maintain or, with the owners consent, adjust the designated 300-foot buffer zone.

CRITERION 4: WILDERNESS STUDY AREAS

Recommended Criterion:

Federal lands designated as wilderness study areas shall be considered unsuitable for coal mining while under review by the Administration and the Congress for possible wilderness designation. For any Federal land which may be leased or mined prior to completion of the wilderness inventory by the surface management agency, the environmental impact statement (or analysis) of the lease sale or mine plan must consider whether the land possesses the characteristics of a wilderness study area. If the finding is affirmative, the land shall be considered unsuitable, unless issuance of noncompetitive coal leases and mining on leases is authorized under the Wilderness Act and the Federal Land Policy and Management Act of 1976.

Exemption: The application of this criterion to lands for which the Bureau of Land Management is the surface management agency is subject to valid existing rights.

Results: The initial wilderness inventory does not identify any areas within the unsuitability criteria study area for intensive wilderness inventory. The initial wilderness inventory is currently available for public review and is subject to change. The final decision for the initial inventory will be made in September 1979.

CRITERION 5: SCENIC AREAS

Scenic Federal lands designated by visual resource management analysis as Class I (an area of outstanding scenic quality or high visual sensitivity) but not currently on the National Register of Natural Landmarks shall be considered unsuitable.

A lease may be issued and mining operations approved if the surface management agency determines that mining operations will not significantly diminish or adversely affect the scenic quality of the designated area.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which a permit has been issued.

Results: Class I delineation applies only to existing Wilderness Areas, some natural areas, wild portions of the Wild and Scenic Rivers, and other similar situations where management activities are to be restricted. No such areas have been identified.

CRITERION 6: LANDS USED FOR SCIENTIFIC STUDIES

Federal lands under permit by the surface management agency, and being used, for scientific studies involving food and fiber production, natural resources or technology demonstrations and experiments shall be considered unsuitable for the duration of the study, demonstration, or experiment, except where mining could be conducted in such a way as to enhance, or not jeopardize the original purposes of the study, as determined by the surface management agency, or where the principal scientific user or agency gives written concurrence to all or certain methods of mining.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: No Federal lands under permit for scientific studies have been identified within the study areas.

CRITERION 7: HISTORIC LANDS AND SITES

All districts, sites, buildings, structures, and objects of historic, architectural, archeological, or cultural significance which are included in or eligible for inclusion in the National Register of Historic Places, and an appropriate buffer zone around the outside boundary of the designated property (to protect the inherent values of the property that made it eligible for listing in the National Register) as determined by the surface management agency in consultation with the Advisory Council on Historic Preservation and the State Historic Preservation Office shall be considered unsuitable.

Exception: All or certain types of stipulated mining may be allowed if the surface management agency determines after consultation with the Advisory Council on Historic Preservation and State Historic Preservation Officer that the direct and indirect effects of mining, as stipulated, on a property in or eligible for the National Register of Historic Places will not result in significant adverse impacts to the property.

Exemption: The application of this criterion is subject to valid existing rights.

Results: (See Illustration 4 opposite page) Nine archaeological sites have been noted as "eligible to the National Register of Historic Places" by the State Historic Preservation Office. These sites were located by systematic professional surveys which encompassed 10% of the lands under consideration. The rest of the areas were considered suitable because no additional inventory has been done.

The majority of historic resources located on lands in the study area are found on private lands underlain by Federal mineral estate. These sites represent the broad patterns of settlement of northwestern Colorado. Most of the sites are homestead attempts that failed. For further general information see: F. J. Athearn, An Isolated Empire, (Denver, Colorado: Bureau of Land Management, 1976). Application of 36 CFR 800.10 (eligibility for the National Register of Historic Places (NRHP)) indicates that 15 of the sites are common remains of this historic period and are not associated with important people, or events, and none represent outstanding architecture or are the work of a master. Further, none of these sites appear that they will yield information important to history or pre-history.

Due to a lack of time, there was no consultation with the Advisory Council. The exception was not applied, and therefore the nine sites are considered unsuitable.

Stipulations:

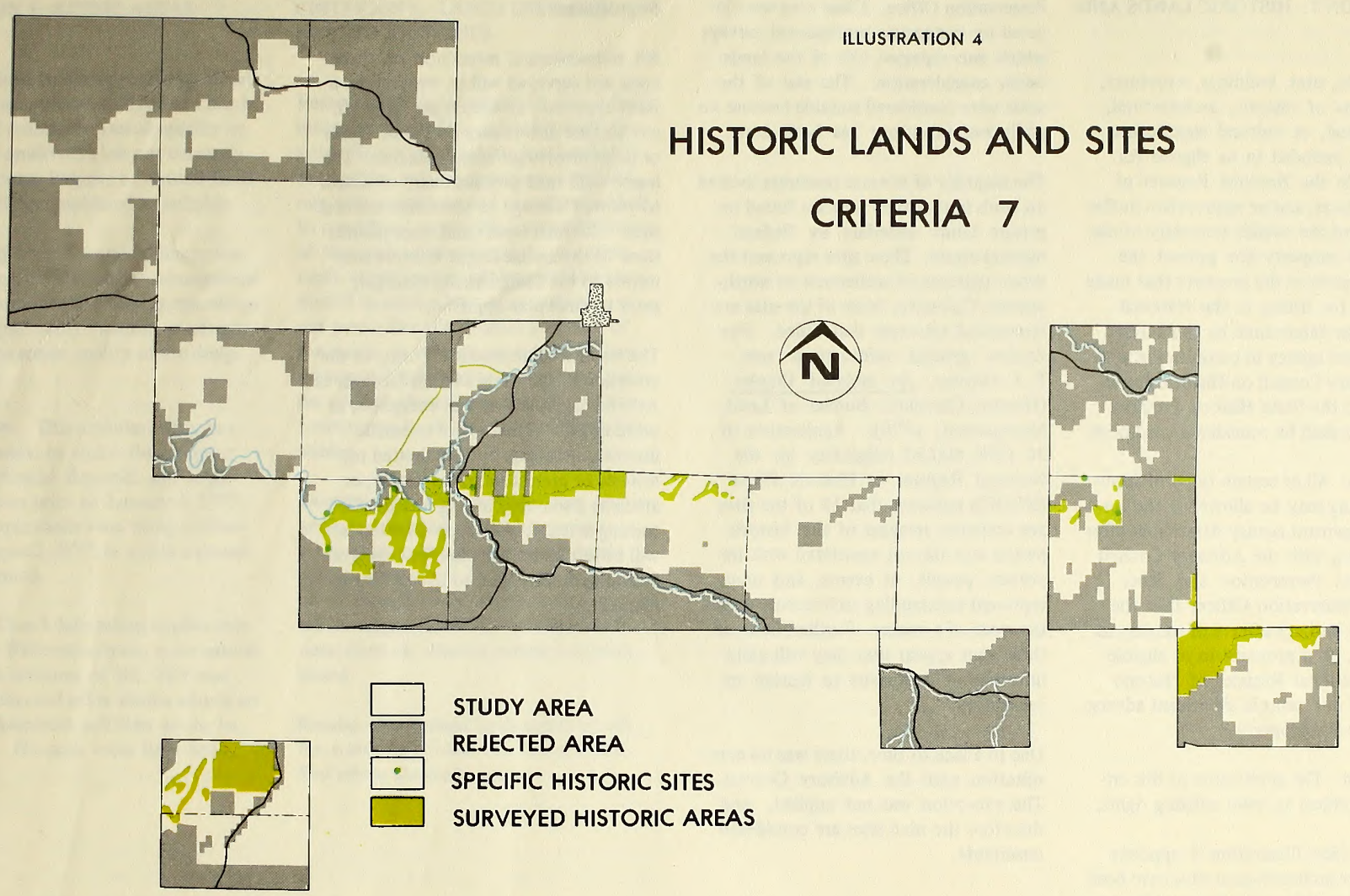
An archaeological inspection on those areas not surveyed will be required by a BLM-approved archaeologist prior to any surface disturbance on Public Lands or lands involving Federal minerals. The lessee shall take precautionary measures to prevent damage to identified cultural sites. The final report and recommendations of the archaeologist must be submitted to the Craig District Manager, prior to mine plan approval.

The lessee shall immediately bring to the attention of the Craig District Manager or Area Manager, any and all antiquities or other objects of historic or scientific interest, including, but not limited to, historic or prehistoric ruins, fossils, or artifacts discovered during surface disturbing activity. Any such discoveries will be left intact until the lessee is given authorization to proceed by the District Manager.

ILLUSTRATION 4

HISTORIC LANDS AND SITES

CRITERIA 7



CRITERION 8: NATURAL AREAS

Federal lands designated as natural areas or as National Natural Landmarks shall be considered unsuitable.

Exceptions: A lease may be issued and mining operations approved in an area or site if the surface management agency determines that:

i with the concurrence of the state, the area or site is of regional or local significance only;

ii. the use of appropriate stipulated mining technology will result in no significant adverse impact to the area or site; or

iii the mining of the coal resource under appropriate stipulations will enhance information recovery (e.g., paleontological sites).

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: No areas have been officially designated as Natural Areas within the area of study.

CRITERION 9: FEDERALLY LISTED ENDANGERED SPECIES

Federally designated critical habitat for threatened or endangered plant and animal species, and habitat for Federal threatened or endangered species which is determined by the Fish and Wildlife Service and the surface management agency to be of essential value and where the presence of threatened or endangered species has been scientifically documented, shall be considered unsuitable.

A lease may be issued and mining operations approved if, after consultation with the Fish and Wildlife Service, the surface management agency determines the species and its habitat will not be adversely affected by all or certain stipulated methods of coal mining operations.

Results: (See Illustration 5)
This criterion affects habitat for fish species, Colorado Squawfish and Humpback Chub, and also winter habitat for the Bald Eagle. The buffer zones were determined through consultation with the Fish and Wildlife Service and BLM personnel as being required to alleviate any adverse impacts to the T/E species.

The principal reasons for eliminating these areas are:

1. Breeding and reproductive area for the fish species;

2. Key habitat site critical to population maintenance and survival; and

3. Migration routes for seasonal use.

After consultation with the Fish and Wildlife Service, it was determined species habitat for federally listed T/E species would be adversely affected. Therefore, the areas were considered unsuitable and the exception non-applicable.

CRITERION 10: STATE LISTED ENDANGERED SPECIES

Land containing habitat determined critical or essential for plant or animal species listed by a state pursuant to state law as endangered or threatened shall be considered unsuitable.

Exception: A lease may be issued and mining operations approved if, after consultation with the state, the surface management agency determines that the species will not be adversely affected by all or certain stipulated methods of coal mining.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

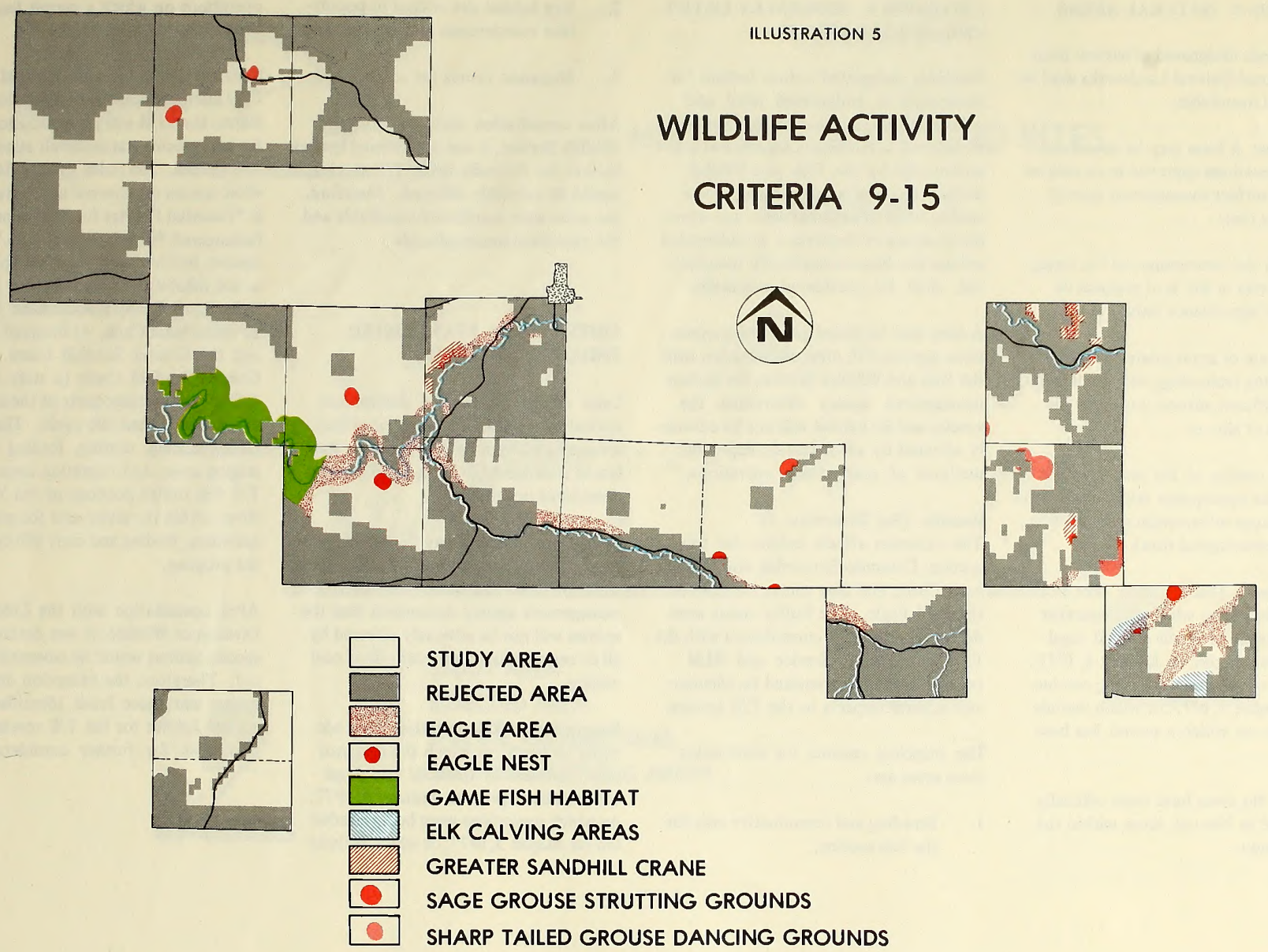
Results: (See Illustration 5) BLM policy, CSO Manual Supplement 6240, Rel. 1096 states: the BLM will protect critical habitat and species status for all state listed T/E species. The index used to determine what species are covered in the study area is "Essential Habitat for Threatened and Endangered Wildlife in Colorado." The species involved are four fish species which inhabit the Yampa River: 1) Colorado Squawfish, 2) Razorback Chub, 3) Humpback Chub, 4) Bonytail Chub, and the Greater Sandhill Crane. The Greater Sandhill Crane (a state listed T/E species) utilizes parts of the area for all phases of their life cycle. These include dancing, nesting, feeding areas, staging areas, and migration areas. The T/E fish utilize portions of the Yampa River within the study area for migration, spawning, feeding and early life cycle of the progeny.

After consultation with the Colorado Division of Wildlife, it was determined species habitat would be adversely affected. Therefore, the exception does not apply, and those lands identified as critical habitat for the T/E species are unsuitable for further consideration.

ILLUSTRATION 5

WILDLIFE ACTIVITY

CRITERIA 9-15



CRITERION 11: BALD AND GOLDEN EAGLE NESTS

A bald or golden eagle nest that is determined to be active and an appropriate buffer zone of land around the nest area shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the U. S. Fish and Wildlife Service.

Exceptions: A lease may be issued and mining operations approved if:

1. they can be conditioned in such a way, either in manner or period of operation, that eagles will not be disturbed during breeding season; or
2. golden eagle nest sites will be moved with the concurrence of the Fish and Wildlife Service.

Results: (See Illustration 5) No active bald eagle nests have been identified in the study area. Active golden eagle nests and a recommended 1/4 mile buffer zone were considered unsuitable. Seasonal restrictions may be required with some buffer areas being suitable for mining at times other than the breeding/rearing season. This will require further study on a site specific basis.

CRITERION 12: BALD AND GOLDEN EAGLE ROOST AND CONCENTRATION AREAS

Bald and golden eagle roost and concentration areas used during migration and wintering shall be considered unsuitable.

Exception: A lease may be issued and mining operations approved if the surface management agency determines that all or certain stipulated methods of coal mining can be conducted in such a way, and during such periods of time, to ensure that eagles shall not be adversely disturbed.

Results: (See Illustration 5) Known eagle winter concentration and roost areas occur along major perennial drainages such as the Yampa and Williams Fork Rivers and are considered unsuitable. Because this habitat would be adversely affected by mining, the exception was not applicable and these areas are unsuitable for further consideration.

CRITERION 13: FALCON CLIFF NESTING SITES

A falcon cliff nesting site (excluding kestrel nest sites) with active nests and a buffer zone of land around the nest site area shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the U. S. Fish and Wildlife Service.

Exception: A lease may be issued and mining operations approved where the surface management agency, after consultation with the Fish and Wildlife Service, determines that all or certain stipulated methods of coal mining will not adversely affect the migratory bird habitat during the periods when such habitat is used by the species.

Results: The areas under study do not contain active falcon nest sites.

CRITERION 14: MIGRATORY BIRDS

Federal lands which are high priority habitat for migratory bird species of high Federal interest on a regional or national basis, as determined jointly by the surface management agency and the Fish and Wildlife Service, shall be considered unsuitable.

Exception: A lease may be issued and mining operations approved where the surface management agency, after consultation with the Fish and Wildlife Service, determines that all or certain methods of coal mining will not adversely affect the migratory bird habitat during the periods when such habitat is used by the species.

Results: There are no areas which are habitat for migratory bird species of high Federal interest within the study area.

CRITERION 15: STATE RESIDENT FISH AND WILDLIFE

Federal lands which the surface management agency and the State jointly agree are fish and wildlife habitat for resident species of high interest to the State and which are essential for maintaining these priority wildlife species shall be considered unsuitable. Examples of such lands which serve a critical function for the species involved include:

1. Active dancing and strutting grounds for sage grouse, sharp-tailed grouse, and prairie chicken;
2. Most-critical winter ranges for deer, antelope, and elk; and
3. Migration corridors for elk.

A lease may be issued and mining operation approved if, following consultation between the State and the land management agency, it is determined that the coal mining will not have a significant long-term impact on the species being protected.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: (See Illustration 5) The application of Criteria 9-15 have considerable areas of overlap. Through joint consultation with the Colorado Division of Wildlife, it was agreed that stipulations and mitigation on a site specific basis would be necessary for protection and enhancement of species and habitat.

It was recommended that a ½ mile buffer zone will protect active strutting and dancing grounds from disturbance. Additional buffers will be determined on a site-specific basis as needed. After consultation with Colorado Division of Wildlife, it was agreed that the disturbance to deer and elk critical winter range and migration corridors could be mitigated. The formulation of specific mitigating measures requires knowledge of the specific area to be mined, and the amount and duration of land disturbed. These areas shall be considered suitable pending a site specific evaluation during activity planning or mine plan evaluation.

CRITERION 16: FLOODPLAINS

Riverine, coastal, and special floodplains (100-year recurrence interval) shall be considered unsuitable unless the surface management agency determines, after consultation with the U. S. Geological Survey, that specific leasing can be undertaken without substantial threat or loss to people or property and the natural and beneficial values of the floodplain on the lease tracts and downstream.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: (See Illustration 6) Flood prone areas are considered unsuitable due to the potential for harm to people and property. These areas have been delineated as channels only. Additional areas immediately adjacent to each channel could also be included as unsuitable. A present lack of detailed information at the present time precludes an exact description of these flood prone areas. The subject areas should be expanded subject to further data collection at the coal activity planning stage, and subject to further data collection in subsequent MFP revisions.

Stipulations:

Stipulations should include the following: An appropriate buffer zone on all major drainages will be determined by the land management agency at the time of lease or adoption of an approved mine plan.

CRITERION 17: MUNICIPAL WATERSHEDS

Federal lands which have been committed by the surface management agency to use as municipal watersheds shall be considered unsuitable.

Exception: A lease may be issued and mining operations approved where:

i the surface management agency determines as a result of studies that all or certain stipulated methods of coal mining will not adversely affect the watershed to any significant degree; and

ii the municipality (incorporated entity) or the responsible governmental unit concurs in the issuance of the lease.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: No municipal watersheds have been identified as lying within the potential coal lease areas.

CRITERION 18: NATIONAL RESOURCE WATERS

Federal lands with National Resource Waters, as identified by States in their water quality management plans, and a buffer zone of Federal lands 1/4 mile from the outer edge of the far banks of the water, shall be unsuitable.

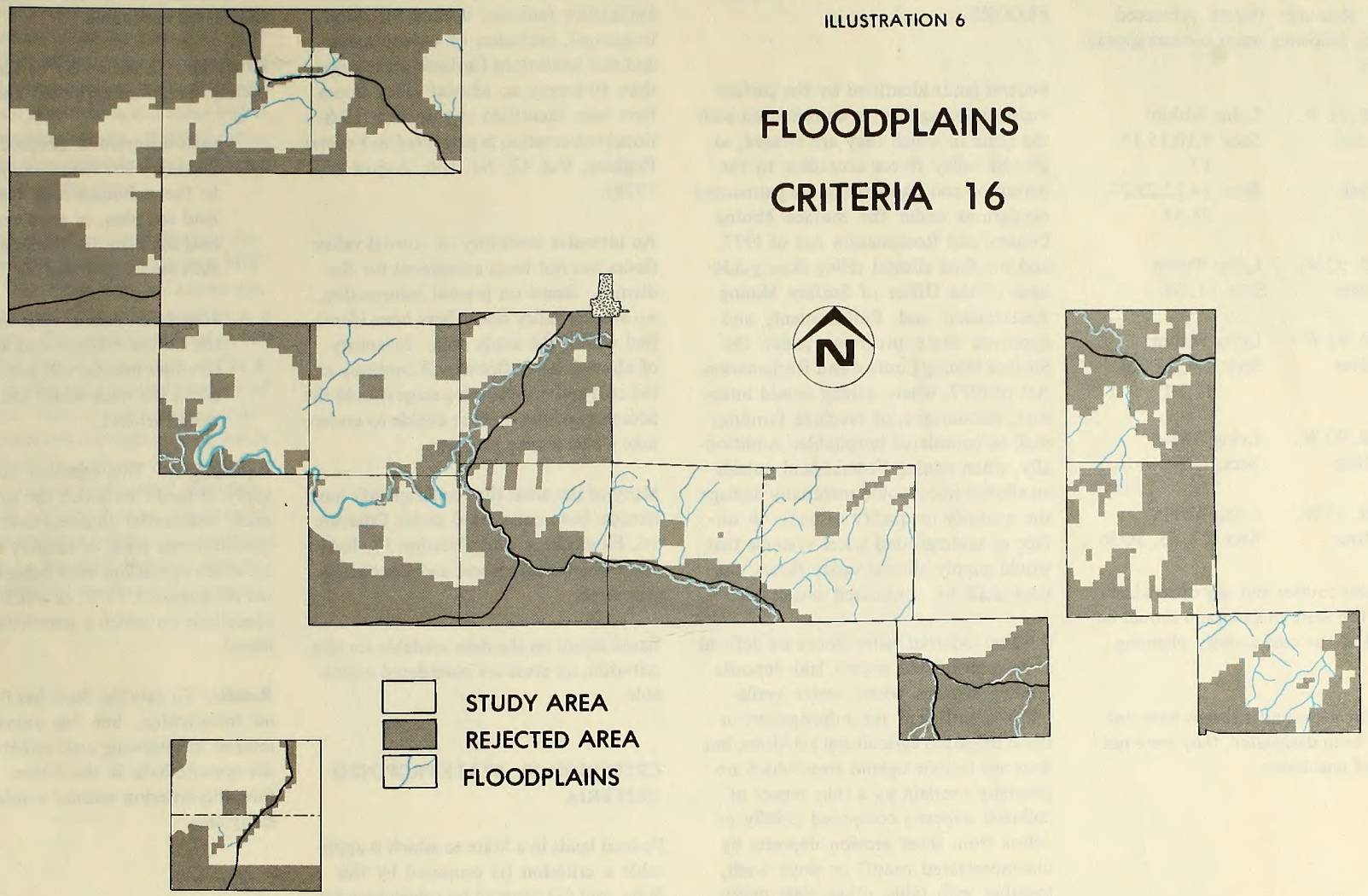
Exception: The buffer zone may be eliminated or reduced in size where the surface management agency determines that it is not necessary to protect the National Resource Waters.

Results: The State of Colorado is presently working on the project of identifying and labeling National Resource Waters. As part of their definition of National Resource Waters, a stream must have perennial or continuous flow and be of high quality, capable of supporting trout fisheries. To date, no water courses in the study area have been officially designated as National Resource Waters in completed water quality management plans. However, based on

ILLUSTRATION 6

FLOODPLAINS

CRITERIA 16



available data and the definition of National Resource Waters presented above, the following water courses appear to qualify:

T. 4 N., R. 86 W. :	Lying Within:
Middle Creek	Secs: 9,10,15,16, 17
Trout Creek	Secs: 14,22,23,27, 28,33
T. 6 N., R. 92 W.:	Lying Within:
Yampa River	Secs: 31, 36
T. 5 N., R. 92 W.:	Lying Within:
Yampa River	Secs: 1,4,5,7,8,9, 11,12
T. 5 N., R. 92 W.:	Lying Within:
Yampa River	Secs: 1, 2
T. 6 N., R. 93 W.:	Lying Within:
Yampa River	Secs: 27, 28, 34-36

These water courses and any others identified by the State of Colorado should be evaluated at the coal activity planning stage.

Because the areas under review have not officially been designated, they were not considered unsuitable.

CRITERION 19: ALLUVIAL VALLEY FLOORS

Federal lands identified by the surface management agency, in consultation with the State in which they are located, as alluvial valley floors according to the definition and standards in the permanent regulations under the Surface Mining Control and Reclamation Act of 1977, and the final alluvial valley floor guidelines of the Office of Surface Mining Reclamation and Enforcement, and approved State programs under the Surface Mining Control and Reclamation Act of 1977, where mining would interrupt, discontinue, or preclude farming, shall be considered unsuitable. Additionally, when mining Federal land outside an alluvial floor would materially damage the quantity or quality of water in surface or underground water systems that would supply alluvial valley floors, the land shall be considered unsuitable.

Results: Alluvial valley floors are defined as unconsolidated stream laid deposits holding streams where water availability is sufficient for subirrigation or flood irrigation agricultural activities, but does not include upland areas which are generally overlain by a thin veneer of colluvial deposits composed chiefly of debris from sheet erosion deposits by unconcentrated runoff or slope wash, together with talus, other mass movement accumulation and windblown deposits.

By applying the requirements of water availability (amount needed for flood irrigation), exclusion of upland areas, and size limitations (isolated areas larger than 10 acres); no alluvial valley floors have been identified at this time (additional information is presented in Federal Register, Vol. 43, No. 166, August 25, 1978).

An intensive inventory of alluvial valley floors has not been completed for the district. Based on present information, no alluvial valley floors have been identified within the study area. Inventory of alluvial valley floors will continue at the coal activity planning stage should the Secretary of the Interior decide to undertake a coal leasing program.

Many of the areas that could qualify have already been considered under Criterion 16, Floodplains, and Criterion 11, Bald and Golden Eagle Roost and Concentration Area.

Based solely on the data available for this criterion, no areas are considered unsuitable.

CRITERION 20: STATE PROPOSED CRITERIA

Federal lands in a State to which is applicable a criterion (i) proposed by the State, and (ii) adopted by rulemaking by the Secretary of the Interior, shall be considered unsuitable.

Exception: A lease may be issued and mining operations approved when:

i such criterion is adopted by the Secretary less than 6 months prior to the publication of the draft land use plan, or supplement to a land use plan, for the area in which such land is included; or

ii after consultation with the State, the surface management agency determines mining will not adversely affect the value which the criterion would protect.

Exemptions: This criterion does not apply to lands: to which the operator made substantial financial and legal commitments prior to January 4, 1977; on which operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results: To date the State has furnished no information, but has expressed interest in reviewing coal activity on a site specific basis in the future. Therefore, this criterion was not applied to the study area.

VI. MULTIPLE USE RESOURCE MANAGEMENT DECISIONS

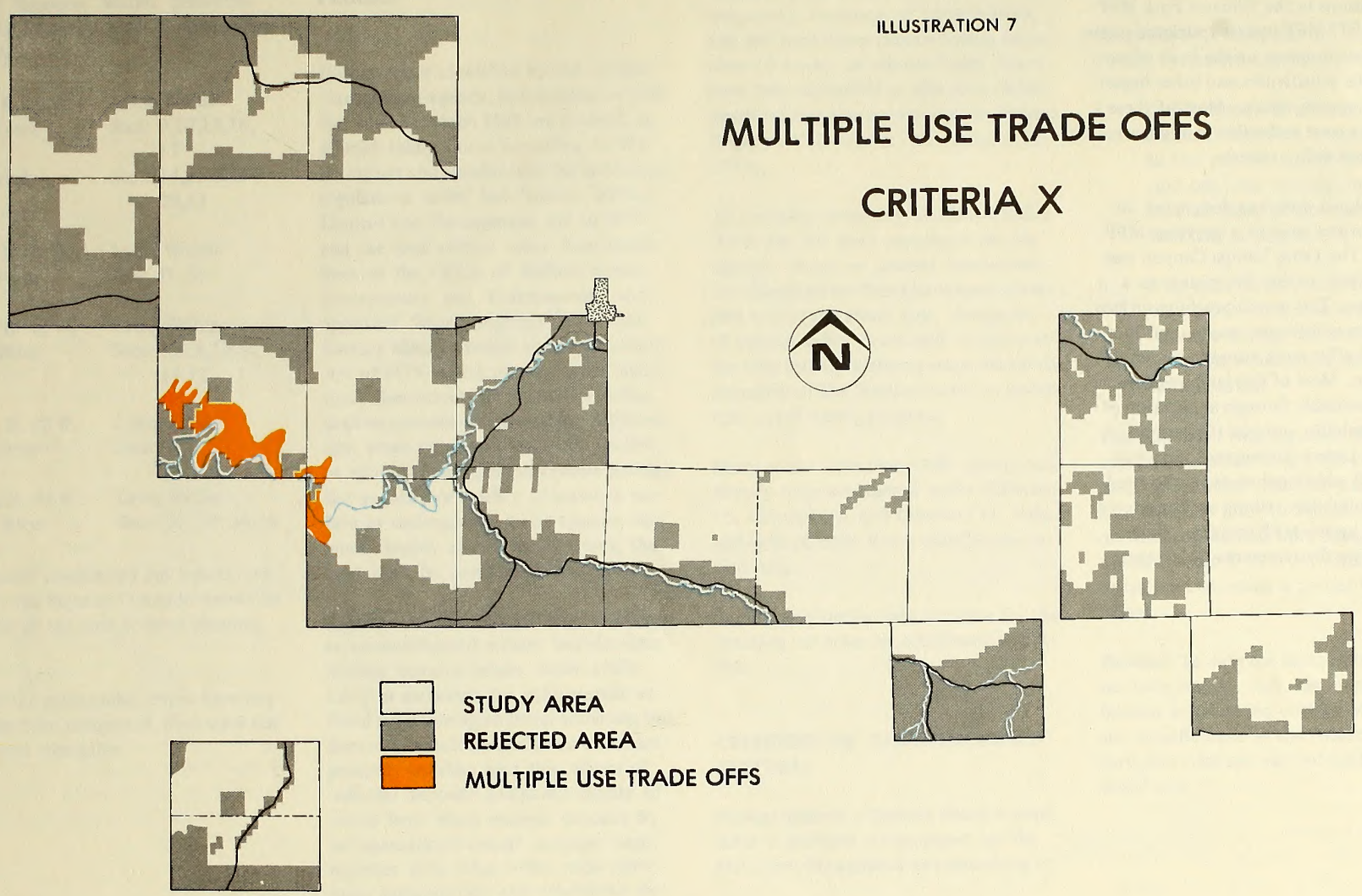
Recommendations and resource management decisions in the Williams Fork MFP and the 1977 MFP update restricted potential coal development on the basis of environmental sensitivities and other higher priority resource values. Most of these restrictions were embodied in application of the unsuitability criteria.

One additional area was designated unsuitable on the basis of a previous MFP decision. The Little Yampa Canyon was recommended to be designated as a natural area. This would preclude surface disturbance within the canyon and in a 200-foot buffer zone around the rim of the canyon. Most of this land was considered unsuitable through application of the unsuitability criteria (Criterion 9, Federally Listed Endangered Species). About 700 additional acres not covered in the unsuitability criteria are considered unsuitable by the MFP decision. Ilustration 7 shows the recommended natural area.

ILLUSTRATION 7

MULTIPLE USE TRADE OFFS

CRITERIA X



VII. SURFACE OWNER CONSULTATION

Public Law 95-87, Surface Mining Control and Reclamation Act, August 3, 1977, Section 714 says that the Secretary of the Interior shall not enter into any lease of Federal coal until the surface owner has given written consent to permit surface mining on his land. To qualify under Section 714, the surface owner must:

1. Hold legal or equitable title to the land surface;

2. Have his principal place of residence on the land or personally conduct farming or ranching operations on the land that would be affected by mining; and

3. Have met the conditions of 1. and 2. above at least 3 years prior to granting consent or rejection.

Industry will be responsible for acquiring this formal surface owner consent prior to a lease sale announcement.

As also required by Section 714, surface owners were consulted in conjunction with preparation of the Williams Fork Management Framework Plan Supplement. Of the 16 townships evaluated using the unsuitability criteria, 142,280 acres (including public lands) were considered suitable for mining prior to surface owner consultation. Inquiries involving 187 separate ownerships of land were mailed to surface owners. Surface owners were given 30 days to respond. The land of those not responding was considered to be suitable for further consideration, but a formal consent will be required before actual leasing.

Of the 187 parcels, 79 owners (36%) responded (see Table 4). As a result of surface owner consultation, an additional 10 percent of the 166,464 acres was considered unsuitable for mining.

On the basis of these inquiries, surface owners indicated several major concerns:

1. Objection to mining because the land serves as wildlife habitat for antelope and deer as well as providing forage for domestic animals;

2. Not aware of Federal ownership of coal underlying their surface;

3. Objection to lack of government remuneration for damage and disturbance of their surface;

4. Encouragement to BLM to expedite its review procedures so that the long-awaited leasing program could begin;

5. Wishing an end to government harassment and control of private business;

6. Concern that roads required for mining would open country to livestock problems (i.e., rustlers, poachers, general nuisance);

7. Suggestion that about a 5% royalty be granted to the land owner where government owns coal and minerals and be attached to the land only, never transferable or separated from the land.

Illustration 8 shows those areas where surface owners were against leasing, in favor of leasing, and where no response was received.

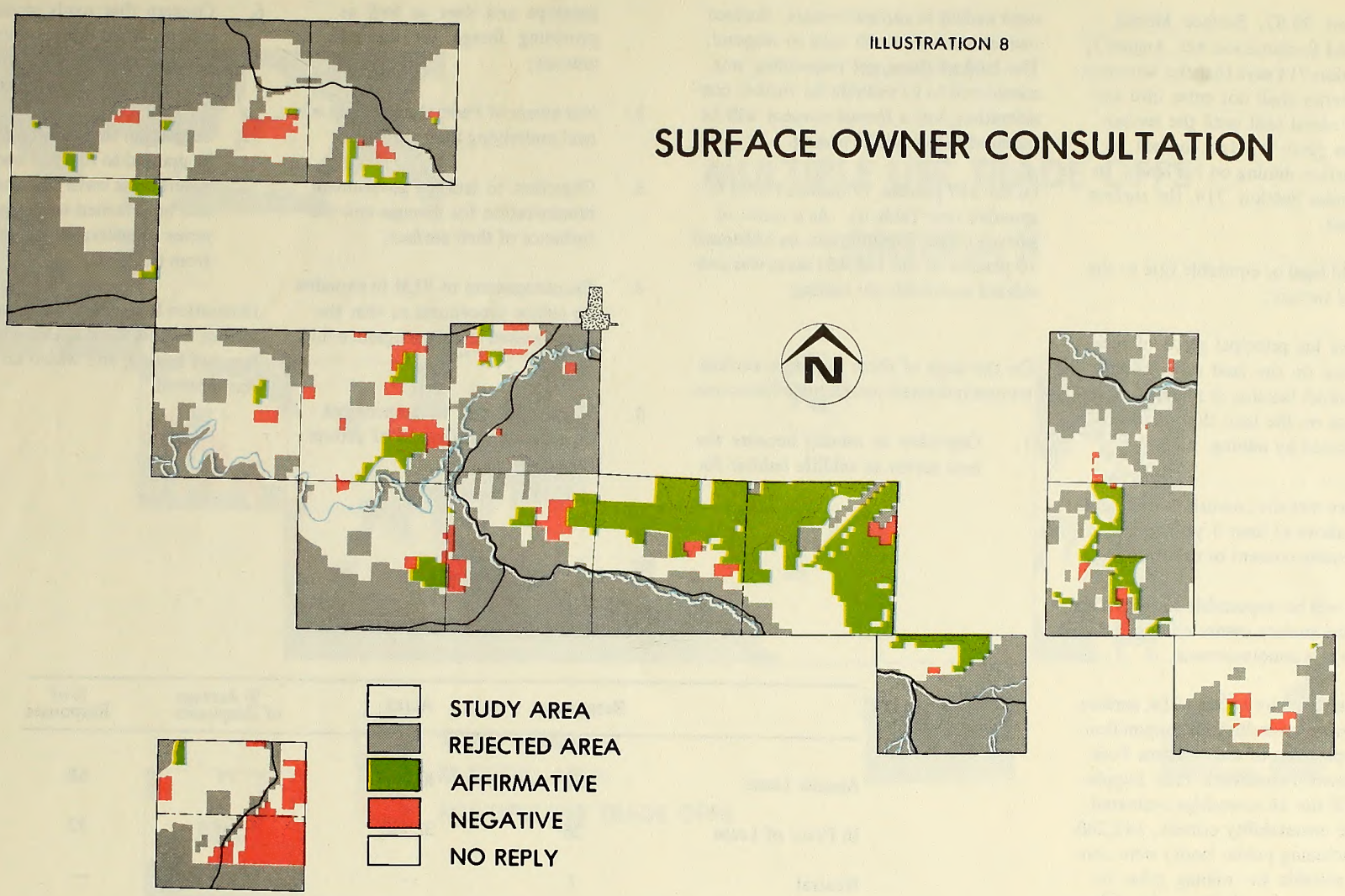
TABLE 4

SURFACE OWNER CONSULTATION

	Responses	Acres	% Acreage of Responses	% of Responses
Against Lease	52	10,060	34	68
In Favor of Lease	26	31,560	66	32
Neutral	1	---	---	---

ILLUSTRATION 8

SURFACE OWNER CONSULTATION



VIII. PUBLIC PARTICIPATION

Public meetings were held in Craig and Denver, Colorado, to explain the purpose and methodology of the MFP supplement and the results of the draft supplement. The meetings were held in both places to encourage input, respectively, from the local populus and environmental and industry representatives headquartered in Denver.

A first set of two meetings was held in February, 1979, to explain what lands would be considered for leasing and the nature and method of application of the unsuitability criteria. Notices of the meetings were published in the Federal Register and distributed to appropriate news media. Fewer than ten attendees were present at each of the meetings, with the coal industry having the largest representation. Most of the comments at the meetings were directed toward the meaning and interpretation of the unsuitability criteria.

The second set of two meetings was held in April, 1979, to receive comments and suggestions on the draft results of the MFP supplement.[5] Over 400 notices were mailed to interested parties and the news media notified. Sixteen people were present at the meeting in Craig, 13 in Denver. Attendees were evenly divided among industry, environmental groups, and the general public.

The results of the application of each criterion were explained during the meeting. Comments were presented on virtually all of the applicable criteria, with most being directed toward the criteria dealing with wildlife and biologic resources. Written comments were requested. To date only one has been received.

The draft supplement was also presented to the staff of the Governor of Colorado in April, 1979. Representatives of interested state boards and departments were present. No written comments or suggestions have been received from them.[6]

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[5] Surface owner consultation was not completed at this time, and was not presented at the meeting.

[6] One written comment was submitted concerning the effect of the unsuitability designations on possible future state road construction projects.

IX. FUTURE FEDERAL ACTION - WHERE DO WE GO FROM HERE?

Completion of this Management Framework Plan Supplement is the first of many steps required to implement the Secretary of Interior's coal management program. The objective of this program is to improve the management of Federal coal resources and to operate a coal leasing program capable of responding to national production goals. To meet this objective, the following additional phases of the program will be undertaken:

Activity Planning. Activity planning for each Federal resource - coal, timber, forage, etc. - in the planning area follows completion of the Management Framework Plan. Coal resource activity planning would be conducted by the Bureau of Land Management and would involve the delineation, ranking, selection, and scheduling of tracts for lease sale from the land identified as acceptable for further consideration for leasing. Tract identification and analysis would include expressions of interest from industry and recommendations from other Federal and State and local governments. Tract ranking, selection and scheduling would be conducted in close coordination with the Governors of the states comprising the coal region and in consultation with all affected Federal land management agencies and other Federal or State agencies with relevant expertise.

Regional Production Goals and Leasing Targets. The major coal bearing areas of the country have been divided into 12 coal regions. In the Federal coal management program, each region would be managed as a separate coal production unit. Within each of these regions, a total regional production goal and a regional leasing target for Federal coal would be developed based on an assessment of new leasing needs.

These regional production goals and leasing targets would be projected every two years by the Department of the Interior, based in part on projections by the Department of Energy with input from State governments and the public. A four-year lease sale schedule would then be developed based on these targets.

Regional Environmental Statements. To comply with the requirements of the National Environmental Policy Act of 1969, a regional environmental statement (ES) will be prepared for areas affected by the four-year lease sale schedules in each coal production region. The ES that will include the Williams Fork Planning Unit is the Green River-Hams Fork Regional Environmental Statement. Writing of this statement is scheduled to begin in late fall of 1979 and is tentatively scheduled for completion early in 1980.

Each regional ES will include analysis of both the site specific and intraregional impacts of the proposed leasing actions. The regional leasing target, the tract delineation and ranking process, the proposed selection of tracts to be leased, and the proposed lease sale schedule will be included.

New production goals and leasing targets will be established in two years and new tract rankings and sales schedules formulated. If significant changes are proposed, a supplement to the ES would be prepared.

After two more years, a new four-year lease sale schedule will be developed and new regional environmental statements will be prepared for the new schedule.